

Scaphidium incisum, sp. n.

Angustato-ovatum, nigrum, nitidum, supra punctulatum; ♂ tibiis antice inconspicue emarginatis.

L. $4\frac{1}{4}$ – $4\frac{1}{2}$ mill.

Somewhat elliptical, black, shining; the head and thorax clearly, not thickly punctured, transverse punctures of the latter well-marked and similar throughout; the elytra with the sutural stria punctate, continuing as in the last species along the greater part of the base, dorsal surface clearly and evenly punctured, with little or no indication of linear arrangement; legs and antennæ black, male with enlarged anterior tibiæ, the enlargement being feebly emarginate on the inner edge; tarsi brownish; antennæ pitchy red or black at the base.

Hab. Miyanoshita, Nikko, and Mayebashi. Apparently scarce.

Cyparium sibiricum, Solsky.

Hab. S. Yezo, abundantly, and on the main island as far south as Chiuzenji, more rarely. One example in Higo.

L.—*Description of a new Transitional Form of* Ornithoptera *belonging to the Subgenus* Priamoptera. By ROBERT H. F. RIPPON.

IN the August number of the 'Annals'* I described a beautiful and most interesting new species of the genus *Ornithoptera* closely allied to *O. aruana*, Feld., which evidently linked the genus most closely with its section *Priamoptera*. I have now the privilege, by the courtesy of Mr. Elwes, of describing a still more important and interesting novelty discovered by Mr. Doherty in the Island of Talaut, which may ultimately throw much light on the phylogenetic history of the genus, inasmuch as it may be regarded as one of the transitional forms, some of which have probably long since perished, which would enable us to link together in a natural series all the many nominal species which we find it necessary to admit into the subgenus *Pompeoptera*, and even to suggest, on the side of the female at

* 'Annals,' Aug. 1892, p. 193; also in part v. of my 'Icones Ornithopterorum,' where a plate of coloured figures is given.

least, a closer relationship with the *true Ornithoptera* than at one time might have seemed probable.

We owe a debt of gratitude to Mr. Doherty for the faithful and admirable work he has for a long time been doing among the islands and islets of the Sunda Straits and adjacent localities. In this respect he has been rapidly entitling himself to be regarded as a second Wallace. The novelty which is now before us appears to me to be one of the most useful contributions to the Rhopalocerous fauna which he has been enabled to send to us.

I have therefore much pleasure in dedicating this new species to him, partly at the suggestion of Mr. Elwes, and partly because I think it is right to give what honour we can to those who faithfully spend their health and energies in difficult regions of the earth, for the purpose of discovering those lovely things which furnish us with fresh materials for one of the most delightful studies, and with an increased knowledge of God's works.

Ornithoptera (Priamoptera) Dohertyi, sp. n.

♂. Primaries an intense silky black, almost like a burnished black, with a faint green gloss in certain lights, which gives it an exceedingly rich appearance. The grey discal rays which enclose the nervules are so obscurely represented as to be scarcely visible except when the light is transmitted from the underside. The veins are all well expressed, being somewhat lighter on the dark and much darker on the light parts of the wing; the costa is also of the same tint, especially near the apex when viewed opposite the light; the costal outline is nearly straight to two thirds of its length, or at the termination of the costal nervure, when it curves considerably to the apex, which is so much rounded as to pass insensibly into the posterior margin; the outline of the posterior margin curves somewhat irregularly, with an outward trend much greater in proportion at the termination of the second and third median nervules than at any other part, not excepting the apex; it is very delicately and equally sinuate along its entire outline, with very fine reddish-ochreous fringe-lunules between the veins as usual.

Secondaries entirely glossy black, slightly greenish or bluish according to the position in which they are viewed; the veins sufficiently defined in a lighter tint; the abdominal marginal sexual pouch or fold is a faintly redder black; the posterior margin regularly and sufficiently scalloped, and

without the white fringe-lunules. Hence the entire upper surface of the wings is absolutely immaculate.

Under surface of primaries velvety or silky black, less dark and more glossy towards the posterior margin; within the discoidal cell, at the termination of the third *pseudoneurus*, are a few scarcely visible grey atoms; the discal grey rays enclosing the nervules are strongly defined in a slightly greenish grey, rendered darker by a graduation with black atoms towards the cell; the rays between the third and fourth subcostal nervules are only faint streaks of grey, and only one occurs on the upperside of the third median nervule; the posterior margin almost entirely outlined by the white fringe-lunules, which at the apex slightly encroach upon the costa; veins strongly defined. Secondaries a deep silky black; the abdominal fold or pouch browner, with a fringe of delicate hairs as long as the width of the pouch; the discoidal cell immaculate; between the first and second subcostal nervules is a subquadrate patch of yellow atoms; between the second subcostal and third median nervules a broad discal band of lemon-yellow, forming four subrectangular patches of unequal length, strongly divided by the nervules, the first broadly indented from the direction of the cell, sinuate without, the second indented outwardly and enclosing an elongate black spot, the third indented without and enclosing a slightly interrupted elongate black spot, which nearly divides the yellow area, the fourth lunate without and sharply indented above; viewed obliquely with a side light this yellow band becomes a rich emerald-green, not unlike the green of the typical *Ornithoptera*; the hind margin is without the ochreous fringe-lunules.

Head: antennæ black; eyes chestnut-brown; haustellum silky black. Prothorax with a crimson collar; thorax above velvety black, beneath deep black, with lateral crimson spots; legs black. Abdomen pale brown, bordered with piceous brown; the first segment entirely piceous brown, the subanal segment also of the same colour, margined with creamy white; the anal valves creamy white, with the usual dorsal black termination; laterally the abdomen is of a creamy ochreous white; subdorsal slightly yellower at its junction with the metathorax, more ochreous near the anal valve, the first and second segments well divided by black; the lateral black dots fairly large.

The space of wing enclosed by the two branches of the precostal nervure is more equal in width than is usual till it reaches its junction with the subcostal nervure, when, of course, it becomes narrower. This is really a very striking

character, the nearest resemblance to which is found in the male of *P. hephaestus* so far as I can discover; it is also nearly as rectangular in the female.

Expanse of costa 69 millim.; width of upper wing 57; length of hind wing 44, width 31; length of abdomen or antennæ 31; of legs, first pair, femur 12, tibia 9, tarsi 12; second pair, femur 12, tibia 12, tarsi 15; third pair, femur 11, tibia 13, tarsi 15 millim.

♀. Primaries: costa equally arched but more rounded at the apex, the outline insensibly passing into the posterior margin, which is not so irregularly curved as in the male; inner margin nearly a straight line. Wings light fuscous brown; within the discoidal cell are faint atomic indications of grey markings somewhat like those of the female of *P. haliphron*; the grey discal rays very indistinct except those enclosing the first and second median nervules (which are fairly though faintly defined), broadly separated by the brown margins of the nervules; the *pseudoneura* are only just visible; posterior margin with whitish fringe-lunules. Secondaries slightly darker fuscous brown; within the cell a faint ochreous rufous-yellow spot close to the discocellular nervules; four very short narrow rufous-yellow discal marks, the first 6 millim. long, close to the second discocellular nervule, the second the same length from the cell, the space between the second discocellular and first median nervules broadly incurved and (on the right wing only) enclosing a small brown dot; the third 7 millim. long from the cell, indented two thirds its length, enclosing a brown spot (on the right wing); the fourth 5 millim. long from the cell, indented (on the right wing only about half the size); extremely faint indications of a submarginal band of small spots; the submedian area of wing is clouded pale reddish ochreous, meeting an anal, angular, ochreous, sublunate spot, from which two rays run partly up the abdominal margin; margin sufficiently scalloped, with ochreous fringe-lunules.

Under surface: primaries the same colour as above; the grey rays and discocellular markings similar but much broader, a brighter ochreous red at the outer margin, greenish grey towards the base and confluent between the second discoidal and second median nervules; the marks within the cell are formed of microscopic atoms, and are divided into three submarks—the first broad, one third of the cell in length, the second very narrow and divided by the second *pseudoneurus*, the third or lower one nearly as broad and long as the first and divided by the third *pseudoneurus*; the marginal fringe with a nearly continuous row of ochreous lunules. Second-

aries same colour as above, but slightly darker; a large discocellular pale spot clouded with atoms close to the discocellular nervules; the discal marks corresponding with the four on the upper surface are much paler and extend much further down between the nervules—the first is partly pure and partly formed by atoms, the second is indented with brown, modified by atoms, the third much larger and with a long brown indentation, and the fourth very long, but so interrupted with brown modified by atoms as to form an ochreous ray close to the nervules extending nearly to the marginal border; outside the third median nervule is also an ochreous atomic ray close to the nervule, almost hastate, followed by a second longitudinal stripe extending lower down nearly to the outer margin; the submedian nervule and the abdominal margin have similar ochreous stripes as above, but more prominently developed; there is a broad submarginal band indicated by narrow ochreous stripes and cuneiform spots, so meeting and enclosing the brown areas between the nervules, especially from the second subcostal and third median, as to give them almost the appearance of arches, the bases of which are the fringe-lunules of the posterior margin.

Head: antennæ deep black; eyes chestnut-brown; haustellum black. Thorax and prothorax dark brown, with crimson collar; lateral crimson spots, and subdorsal with less black. Abdomen pale fuscous brown, with lateral borders of reddish ochreous; subdorsal the same, with strongly outlined or entirely fuscous brown segments; anal tuft dark brown.

Expanse of costa 82 millim.; width of upper wing 61; length of lower wing 51, width 45; length of antennæ or abdomen 31, of thorax with head 21. The legs, all but one, are absent from the specimen.

Hab. Isle of Talaut (*Doherty*). Feb. to March 1892.

Some examples of the female are entirely free from discal marks above, as in the male, and in one example more than half the under surface of the primaries is entirely fuscous white, the veins only being dark.

Setting aside the remarkable precostal character of the male, which allies it to *P. hephaestus*, the nearest affinity of the male is with *P. Plateni* on the upperside, appearing like an immaculate var. of that Philippine species. On the under surface of the lower wing the yellow marks suggest an approach to those of *haliphron*; the female also on the upper wing, and somewhat on the under surface, comes nearer to the *haliphron* facies*. The outline of the male primary wing is unlike

* Since writing the above I have been able to compare the females with a female of *Priamoptera iris*, Röbers, and am struck with the resemblance of one or two examples of *P. Dohertyi* with the latter.

that of any other ; nevertheless we have in this species a close ally of *Plateni* and possibly an old form from which perhaps several of the varieties of the *haliphron* and *helena* groups have been derived by differentiation—a transitional species I have long expected would be discovered. After awhile other transitional forms will, I hope, be found, and we may then be able to understand some of the geographical development history of the whole genus.

I am much indebted to Mr. Elwes for the cession of a large and interesting series of this novelty, the types of which, with several varieties, will occupy two plates in the sixth part of my 'Icones Ornithopterorum,' with extended information.

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LI.—*Note on Apteryx Haastii.*

*To the Editors of the 'Annals and Magazine of
Natural History.'*

GENTLEMEN,—In the February number of your Magazine Mr. H. O. Forbes answers my notes on *Apteryx Haastii*. I deeply regret that he considers I have been guilty of an indiscretion in writing about opinions which, although openly expressed, he never published in print, and I hope he will accept my full apology.

I must, however, in justice to myself answer his objections in full. In the first place he contends that, contrary to my statement, *Apteryx Haastii* has only been recorded from the South Island, and that in single specimens in localities only where *A. australis* and *A. Oweni* are found together. In reply to this I have to state that the first four specimens of *A. Haastii* I ever received were young birds of the size of *A. australis*, and were so distinct that I had at first thought they were a new species ; but I now, since my last article, find they are not. These four birds were collected by a German botanist on Stewart's Island and were sent me by Sir Walter Buller. Then Sir Walter Buller sent me alive a young *Apteryx Haastii* without a locality ; and, lastly, he sent me fourteen or fifteen specimens, all collected on the west coast of the North Island, among which were two live birds, male and female, and a chick and rotten egg, all dug out of one hole.